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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/039,769

12/31/2001

Gene Gould

P 016417 272123

9179

27500

7590

07/12/2006

PILLSBURY WINTHROP SHAW PITTMAN LLP

ATTENTION: DOCKETING DEPARTMENT

P.O BOX 10500

McLean, VA 22102

EXAMINER

LEE, HWA S

ART UNIT

PAPER NUMBER

2877

DATE MAILED: 07/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/039,769

Applicant(s)

GOULD ET AL.

Examiner

Andrew Hwa S. Lee

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2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 and 28-70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 and 28-70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Remarks

This Office Action is in response to Applicant's Arguments of 4/21/06.

Terminal Disclaimer

1. The terminal disclaimers filed on 4/21/06 disclaiming the terminal portion of any patent granted on this application has been reviewed and are NOT accepted. The terminal disclaimers have NOT been recorded for the following reason:
2. An attorney or agent, not of record, is not authorized to sign a terminal disclaimer in the capacity as an attorney or agent acting in a representative capacity as provided by 37 CFR 1.34 (a). See 37 CFR 1.321(b) and/or (c).

Double Patenting

1. Claim 28 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 5 and 6 of U.S. Patent No. 6,654,119 in view of U.S. Patent No. 4,973,159 to Sohma et al. Although the conflicting claims are not identical, they are not patentably distinct from each other because the pending claim 28 has all the limitations of claims 5 and 6 but further define the elements of a double monochromator which Sohma et al show. The elements of Sohma's apparatus is discussed below.

2. Claims 56 and 59 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 7 respectively of U.S. Patent No. 6,654,119, the difference is merely that the apparatus claims are recited in a method format.

3. Claims 31-33 and 50 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 20-22 of copending Application No. 10/658,363. Although the conflicting claims are not identical, they are not patentably distinct from each other because the mirrors are renamed as “input” and “output” mirror rather than “excitation” and “emission” mirrors.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. Claims 34-36 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 20-22 of copending Application No. 10/658,363 in view of Wildnauer et al (US 5,233,405). Wildnauer shows a double pass scanning monochromator comprising a polarization rotation device that rotates the polarization components of the light beam by 90 degrees between the first and second passes so that the output of the monochromator is independent of the polarization of the input light beam. At the time of the invention, one of ordinary skill in the art would have used an optical filter (polarization rotation device) to restrict the output light to a selected polarized plane so that the output of the monochromator is independent of the polarization of the input light beam and

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therefore would have inherently used an output filter holder to hold the polarization rotation device.

This is a provisional obviousness-type double patenting rejection.

5. Claims 1-19 and 37-49 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 7 of U.S. Patent No. 6,654,119, the difference is in the structure of the light source. Claims 20-22 and 47 is rejected as applied to claims 1 and 37 above in view of Wildnauer as discussed above.

Claim Rejections - 35 USC § 112

3. Claims 1-22 and 31-55 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: The claims recited that mirrors are “coaxial with an area to be illuminated”. The specification nor the claims define the axis of the mirror or reflective elements. The specification shows an incoming beam and the reflected beam off the reflective surfaces, but no axis is defined. A skilled artisan would understand the axis of an optical element to be the axis which the reflected light shares the same path as the incident light. For a mirror to be coaxial with another mirror as presently claimed, the axis of the first mirror would be the same axis for the second mirror.

Furthermore, “a sample” and “an area to be illuminated” would not inherently have a defined axis since samples can have an irregular shape or a completely symmetrical shape. A

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fluorescing sample would emit light in all directions thus not having a clear definite axis; therefore, it is indefinite for a mirror to be coaxial with an area to be illuminated. It appears the angles at which light impinges Applicant's mirror 304 or 302 is "off-axis" similar to White's off-axis illumination of mirror 36".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 56-65, *as understood by the examiner*, are rejected under 35 U.S.C. 102(b) as being anticipated by White (US 3,825,762).

White shows an apparatus for measuring luminescent radiation comprising:

providing excitation light from a light source;

directing the excitation light through a first double monochromator;

transmitting the excitation light to the sample through a light transfer module;

employing the light transfer module to obtain light emitted by the sample;

selectively analyzing polarization of the light emitted by the sample (column 10, lines

44+)

directing the light emitted by the sample to a second double monochromator; and

analyzing light output by the second double monochromator.

Although in White may not show the same light transfer module of the present invention, the claim as presently standing does not recite any detail of the light transfer module and thus any of the directing mirrors of White would meet the limitations of the light transfer module as presently claimed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 34, *as understood by the examiner*, is rejected under 35 U.S.C. 103(a) as being unpatentable over White (US 3,825,762). White teaches if “the sample emission is highly polarized, the measurement remains accurate provided a polarizer (not shown) of conventional construction is inserted in the beam between the chopper 95 and the slit 52.” Therefore, a skilled artisan would have used an optical filter (polarizer) and it would be inherent that a holder is used for the polarizer, as the polarizer would not be able to stay in position without something to hold the polarizer in place. Furthermore it would be obvious to use a holder that automates insertion and removal of the polarizer rather than manually performing this task since it has been held that broadly providing a mechanical or automatic means to replace manual activity which has accomplished the same result involves only routine skill in the art. In re Venner, 120 UPSQ 192..

8. Claims 35 and 36, *as understood by the examiner*, are rejected under 35 U.S.C. 103(a) as being unpatentable over White as applied to claim 34 above, and further in view of Wildnauer et al (US 5,233,405). Wildnauer shows a double pass scanning monochromator comprising a polarization rotation device that rotates the polarization components of the light beam by 90 degrees between the first and second passes so that the output of the monochromator is independent of the polarization of the input light beam. At the time of the invention, one of ordinary skill in the art would have used an optical filter (polarization rotation device) to restrict the output light to a selected polarized plane so that the output of the monochromator is independent of the polarization of the input light beam .

Response to Arguments

4. Applicant's arguments with respect to claims 55-65 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

5. Claims 1-22, 28-33, 37-55 and 66-70 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims, if any and upon the entry of the terminal disclaimers.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Hwa S. Lee whose telephone number is 571-272-2419. The examiner can normally be reached on Tue-Fr.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley Jr. can be reached on 571-272-2800 ext 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Andrew Hwa Lee
Primary Examiner
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